

REMARKS

In the Office Action mailed September 18, 2003, the Examiner rejected claims 1-6, 8, 13-17, 19-21, 23, 24, 153 and 154, objected to claims 9, 10 and 25 and allowed claims 113-133, 135-152, 155 and 156. By way of the foregoing, Applicants have amended claims 4, 8-10, 113-118, 131-133 and 143 and added claims 157-165. The foregoing amendments and claim additions are taken in the interest of expediting prosecution and there is no intention of surrendering any range of equivalents to which Applicant would otherwise be entitled in view of the prior art.

I. Claim Objections

The Office Action objected to claims 4, 8-10, 13-17, 19-21, 23-25, 131, 143 and 151 under 37 C.F.R. 1.75(a) for, "failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention."

The Office Action suggested that, in claim 4, lines 10-11, "said at least one thermal property of said 5 or more samples" should read "said at least one thermal property of said one of said 5 or more samples". Such change has been made.

The Office Action suggested that, in claim 8, line 2, the proper antecedent basis for "the thermal property" is "at least one thermal property". Thus, "the thermal property" has been changed to read, "the at least one thermal property" for proper antecedent basis.

The Office Action suggested that, in claim 131, line 2; claim 143, line 2; and claim 151, line 1, a comma was unintentionally deleted. Applicants have re-entered those commas in the named claims.

II. Claim Rejections

The Office Action rejected claims 1-6, 8, 13-17, 19-21, 23, 24, 153 and 154 as being unpatentable over US 5,788,833 to Lewis et al. in view of Kimura Mitsuteru (JP 10-260147) and, for certain of the claims, also in view of one or more of US 6,170,318 to Lewis and "Dielectric Monitoring of Polymerization and Cure" (Kranbuehl). Applicants traverse these rejections on at least two grounds. First, the Office Action does not properly establish a prima facie case of obviousness against

the claims of the present application. Second, at least one of the references cited by the Office Action is from a non-analogous art and there is no motivation to combine the references that are cited.

A. The Office Action does not properly consider the language of the claims when attempting to establish a case of obviousness.

Applicants traverse the rejection of each of the rejected claims on the ground that the Office Action has ignored or glossed over language presented in the claims of the application to arrive at unwarranted obviousness rejections under 35 U.S.C. § 103. As such, the rejections posited by the Office Action fail to assert a prima facie case of obviousness under 35 U.S.C. § 103. As stated in the MPEP 2143.03, "To establish prima facie obviousness...all the claim limitations must be taught or suggested by the prior art." In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Moreover, the MPEP states that, "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

In this regard, the Office Action has suggested, at page 4, that, "Lewis et al. '833 (Abstract, figure 1B, col. 2 lines 18-34... col. 20 lines 14-23) disclose the substrate as described in lines 3-5 of," claim 1. However, this suggestion ignores or glosses over the language in claim 1 that reads, "wherein each sensor is associated with one of said 5 or more samples and characterizes at least one thermal property of said one of said 5 or more samples". At best, the sections identified by the Office Action suggest that the '833 patent employs known electrical properties at different temperatures to assist in the detection of analytes in a fluid. It does not characterize properties of samples. In particular, the '833 patent reads at column 2, lines 18-34 (as pointed out by the Office Action),

The invention provides methods, apparatuses, and systems for detecting and identifying analytes in fluids... In use, the resistor provides a difference in resistance between the conductive elements when contacted with a fluid comprising a chemical analyte at a first concentration, than when contacted with a fluid comprising a chemical analyte at a second different concentration'.

The '833 patent also reads at column 10, lines 6-10 (as pointed out by the Office Action),

An electronic nose for detecting an analyte in a fluid is fabricated by electrically coupling the sensor leads of an array of compositionally different sensors to an electrical measuring device. The device measures changes in resistivity at each sensor of the array, preferably simultaneously and preferably over time. Frequently, the device includes signal processing means and is used in conjunction with a computer and data structure for comparing a given response profile to a structure-response profile database for qualitative and quantitative analysis.

Applicants find no suggestion of characterization of properties of samples, much less characterization of thermal properties of samples, in these quoted sections or any other sections suggested by the Office Action. Moreover, the sections cited by the Office Action make it clear that the system of the '833 patent is employed for detecting analytes in fluid samples rather than characterization of properties of samples.

In addition to the above, the Office Action suggests, also at page 4, that, "Lewis et al. '833 (figure 1C, col.8 lines 5-15, 53-61, col. 10 lines 6-11, 15-62, col. 11 lines 7-11) disclose the electronic platform as described in the last 6 lines of..." claim 1. However, this suggestion ignores or glosses over the language in claim 1 that reads, "wherein the signals received by said electronic platform correspond to said at least one thermal property." While the '833 patent mentions particular thermal properties such as thermal stability and melting temperature, it merely mentions these properties as providing limits to the ranges at which the system of the '833 patent can be employed. In particular, the patent reads at column 10, lines 6-10 (as pointed out by the Office Action), "the temperature range across which electrical resistances may be measured will be a function of the resistor composition, for example the melting temperature of the resistor components, the thermal stability of the analyte of interest or any other component of the system, and the like." Applicants find no suggestion of any signal corresponding to properties of samples, much less corresponding to thermal properties of samples, in the quoted section or any other section suggested by the Office Action. Moreover, the sections cited by the Office Action make it clear that

the signals of the system of the '833 patent are designed to correspond to the existence of analytes in fluid samples rather than properties of samples.

In conclusion, the Office Action has ignored language of claim 1. In doing so, the Office Action fails to assert a prima facie case of obviousness against claim 1. Thus, Applicants request that the rejection of claim 1 be withdrawn.

Although Applicants have focused on claim 1 above, Applicants further assert that the Office Action has ignored similar language for each of the rejected claims since the Office Action asserts the '833 patent in the same manner for each of the rejected claims. As such, Applicants also request that the rejection of the other claims be withdrawn as well.

B. The combination of the '833 patent and Mitsuteru is improper since the '833 patent is from a non-analogous art and because there is no motivation to combine Mitsuteru with the '833 patent.

Even if the Office Action had addressed all the language of the rejected claims, the posited rejections would still be improper since the '833 patent is from a non-analogous art and because there is no motivation to combine Mitsuteru with the '833 patent.

The law requires that a reference be from an analogous art to qualify as prior art under section 103. In particular, the MPEP reads at section 2141.01(a) that,

To qualify as prior art under section 103, art must be analogous. Analogous art comprises art in the applicant's field of endeavor and art reasonably pertinent to the particular problem with which the applicant was concerned. In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992); In re Wood, 599 F.2d 1031, 202 USPQ 171, 174 (CCPA 1979).

The '833 patent, however does not come from an analogous art. In particular, the rejected claims of the present application recite an apparatus that is configured for "characterization" of "at least one ... property of ... 5 or more samples". In contrast, the '833 patent is concerned with the detection of analytes in fluids. This is evidenced by the title, which reads, "Sensor for Detecting Analytes in Fluids", by the first sentence of the abstract which reads, "Chemical sensors for detecting analytes in fluids comprise..." and by the claims which recite a, "sensor for detecting the presence of a

chemical analyte..." In the vast field of chemistry, it would be very unlikely that a skilled artisan would look to a system as described in the '833 patent to create a system for characterizing properties of multiple samples. As such, the '833 patent should be disqualified as a prior art reference and the rejections based thereon should be withdrawn.

The law also requires that a proper obviousness rejection provide a motivation to make the particular combination of references. In the case of In re Lee, 61 USPQ2d 1430 (Fed. Cir. 2002), the CAFC wrote, "there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant. Emphasis added. Id. at 1433-34 quoting In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). The need for specificity pervades this authority. Id. at 1433-34 See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313,1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"); In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 47 USPQ2d (Fed. Cir. 1998) ("even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."); In re Fritch, 972 F.2d 1260, 1265, 23 USPQ2d 1780 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references").

At best, the Office Action suggests that, "It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Kimura Mitsuteru to the invention of Lewis et al. '833 as specified above because as taught by Kumura Mitsuteru (Abstract, paragraph 0009) a sample in a trace mount [sic] can then be heated by a heater whose heat capacity is small, and the sample can be heated to a high temperature by very small electric power, providing high-speed response with minute power." However, this statement merely asserts that

Mitsuteru teaches that a sample can be heated by a heater. This statement does not provide any motivation for combining the '833 patent with Mitsuteru much less any specific motivation. As such, the Office Action again fails to assert a prima facie case of obviousness and the rejections of the Office Action should be withdrawn.

In addition, Applicants point out that it would likely be improper to present a final rejection of claims of the present application on a grounds alternative to that already presented since applicants have not amended the claims in a manner, which would necessitate such alternative grounds. In particular, the MPEP reads:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee..." MPEP 706.07(a)

Thus, any new grounds of rejection, "that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee..." would be improper.

III. Allowed Claims and Allowed but Objected to Claims

Applicants thank the Examiner for indications of allowable subject matter.

IV. New Claims

Applicants have added new claims 157-165 to address various aspects of the present invention.

By amending the application, the Applicants do not concede that the patent coverage available to them would not extend as far as the original claim. Rather, Applicants intend to file a continuation application to pursue the breadth of the claims as filed. Applicants believe that the Examiner has not made a sufficient showing of inherency of the teachings of the asserted prior art, especially given the

lack of teachings in the cited references of the properties that Applicants have recited in their claims.

Further, by the present amendment, it does not follow that the amended claims have become so perfect in their description that no one could devise an equivalent. After amendment, as before, limitations in the ability to describe the present invention in language in the patent claims naturally prevent the Applicants from capturing every nuance of the invention or describing with complete precision the range of its novelty or every possible equivalent. See, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 62 USPQ2d 1705 (2002). Accordingly, the foregoing amendments are made specifically in the interest of expediting prosecution and there is no intention of surrendering any range of equivalents to which Applicants would otherwise be entitled.

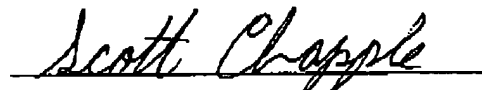
CONCLUSIONS

In view of Applicants' amendments and remarks, the Examiner's rejections are believed to be rendered moot. Accordingly, Applicants submit that the present application is in condition for allowance and requests that the Examiner pass the case to issue at the earliest convenience. Should the Examiner have any question or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned at (248) 593-9900.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent the abandonment of this application, please consider this as a request for an extension for the required time period and/or authorization to charge our Deposit Account No. 50-0496 for any fee which may be due.

Respectfully submitted,

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